

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (Currently Amended) A method for examining foreign matters in through holes formed in a work piece, the method characterized in that light passing through a plurality of through holes having a uniform size is taken as image data by relative ~~translation~~ movement of movement between the work piece and a line sensor camera, and sizes of regions that receive individual passing light in the image data are mutually compared to determine presence or absence of foreign matter.

2. (Cancelled)

3. (Previously Presented) A method for examining foreign matters in through holes according to claim 1, wherein after counting and determining a number of areas of light receiving regions corresponding to the through holes, the areas of light receiving regions are mutually compared.

4. (Previously Presented) A method for examining foreign matters in through holes according to claim 1, wherein areas of light receiving regions are labeled and the labeled areas of light receiving regions are mutually compared to determine presence or absence of foreign matter.

5. (Previously Presented) A method for examining foreign matters in through holes according to claim 1, wherein said step of mutually comparing sizes of regions that receive individual passing light in the image data is based on magnitudes of differences in light receiving regions of adjacent ones of the through holes to determine presence or absence of foreign matter.

6-7. (Cancelled)

8. (Previously Presented) An apparatus for examining foreign matters in through holes, the apparatus comprising:

a light source provided on one side of a work piece and a line sensor camera provided on the other side of the work piece, the work piece having a plurality of through holes;

a parallel displacement system that translates the work piece and the line sensor camera relative to each other to allow the line sensor camera to detect light passing through the plurality of through holes in one lot; and

an image processing device that receives detected signals provided by the line sensor camera to obtain a plurality of binary image data corresponding to the plurality of through holes in the work piece,

wherein the image processing device is equipped with a determination device that makes a determination as to whether foreign matter is present or absent in the through holes based on deviations among receiving light regions corresponding to the respective through holes.

9-14. (Cancelled)